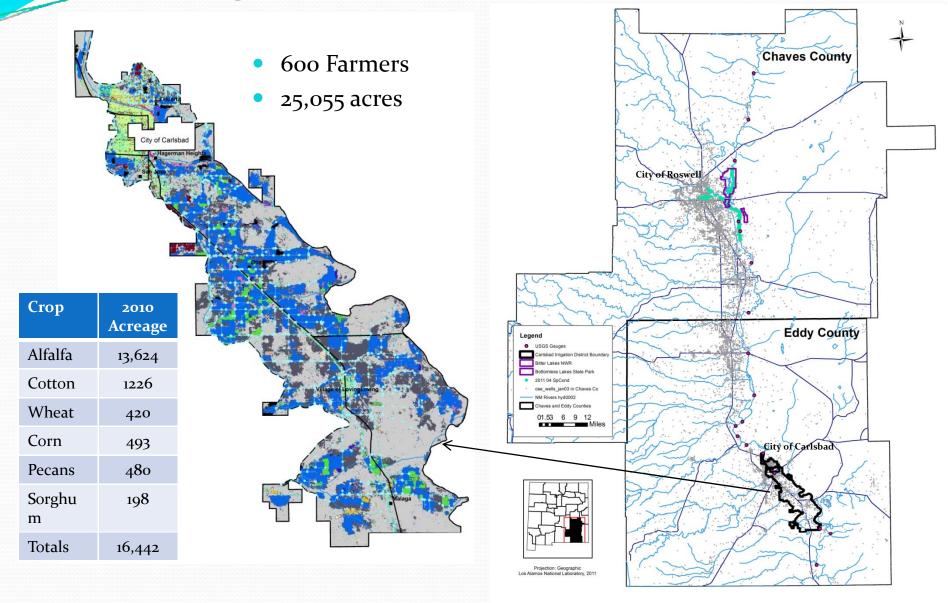
Pecos River Settlement Lessons

Managing Lower Pecos Surface Water Irrigation

During Drought

Carlsbad Irrigation District

Carlsbad Irrigation District (CID)



Lower Pecos Drought Forecast

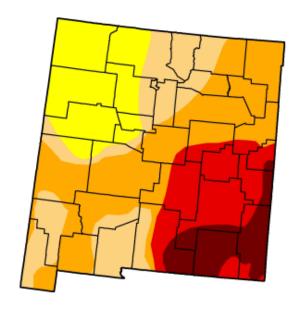
U.S. Drought Monitor

April 10, 2012

New Mexico

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	80.46	58.60	24.94	9.03
Last Week (04/03/2012 map)	0.00	100.00	81.69	60.97	24.94	9.03
3 Months Ago (01/10/2012 map)	8.63	91.37	87.60	72.13	23.37	7.56
Start of Calendar Year (12/27/2011 map)	8.63	91.37	87.60	72.15	23.37	7.57
Start of Water Year (09/27/2011 map)	0.00	100.00	96.40	88.99	69.61	35.13
One Year Ago (04/05/2011 map)	0.00	100.00	94.46	74.32	29.47	0.00



Intensity:

D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe

D3 Drought - Extreme
D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu









Released Thursday, April 12, 2012 David Miskus, NOAA/NWS/NCEP/CPC

Lower Pecos Drought Forecast

U.S. Drought Monitor

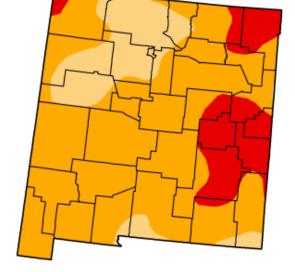
August 21, 2012

Valid 7 a.m. EST

New Mexico

Drought Conditions (Percent Area)

			-				-
		None	D0-D4	D1-D4	D2-D4	D3-D4	D4
	Current	0.00	100.00	100.00	83.17	15.00	0.00
	Last Week (08/14/2012 map)	0.00	100.00	100.00	85.11	25.88	0.00
	3 Months Ago (05/22/2012 map)	0.00	100.00	99.09	71.24	23.99	0.00
	Start of Calendar Year (12/27/2011 map)	8.63	91.37	87.60	72.15	23.37	7.57
	Start of Water Year (09/27/2011 map)	0.00	100.00	96.40	88.99	69.61	35.13
	One Year Ago (08/16/2011 map)	0.00	100.00	100.00	92.66	77.07	42.39



Intensity:

D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe

D3 Drought - Extreme
D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu

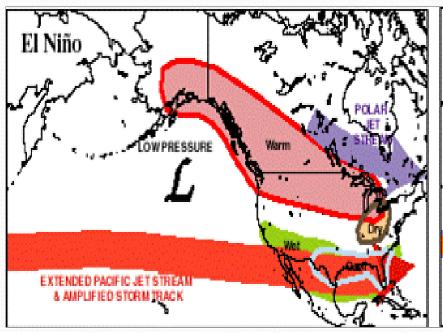


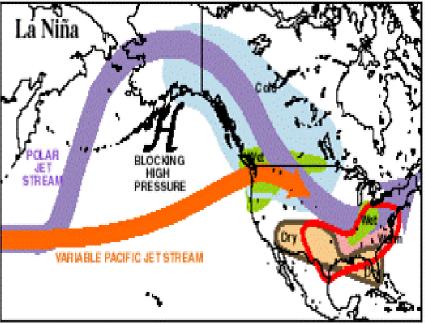




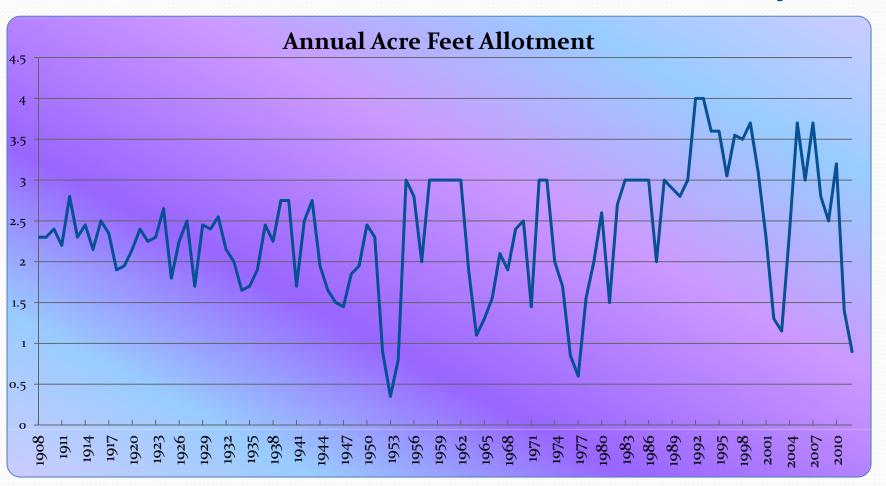
Released Thursday, August 23, 2012 Michael Brewer, National Climatic Data Center, NOAA

El Niño Vs. La Niña Patterns





CID Annual Allotment History



Current Water Allotment

- 100 Year Annual Allotment Average 2.41 af
- 35 Year Annual Allotment Average 2.68 af
- 10 Year Annual Allotment Average 2.59 af
- 2011 Annual Allotment 1.4 af
- 2012 Annual Allotment to Date .9 af

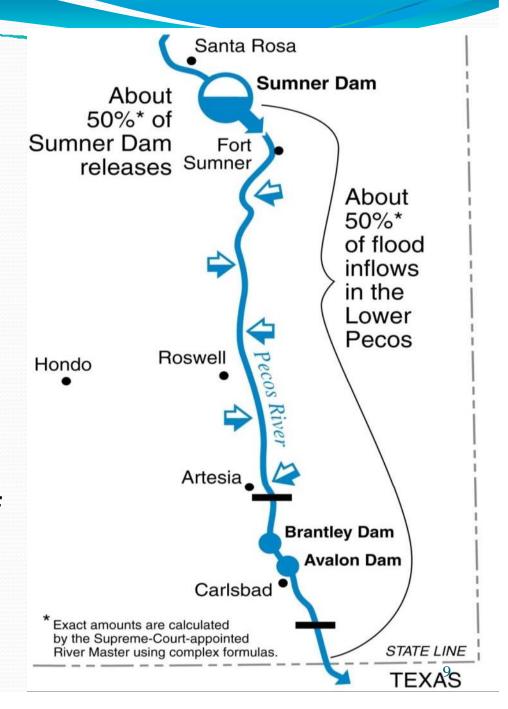
Historic Drought Allotment History

Year	AF	Year	AF	Year	AF	Year	AF	Year	AF
2010 *	3.2	2001	2.3	1976	.85	1964	1.1	1953	.9
2011	1.4	2002	1.3	1977	.6	1965	1.3	1954	.35
2012	.9	2003	1.15	1978	1.55	1966	1.55	1955	.8

^{*} First full year of Settlement implementation

The Compact & Decree Require

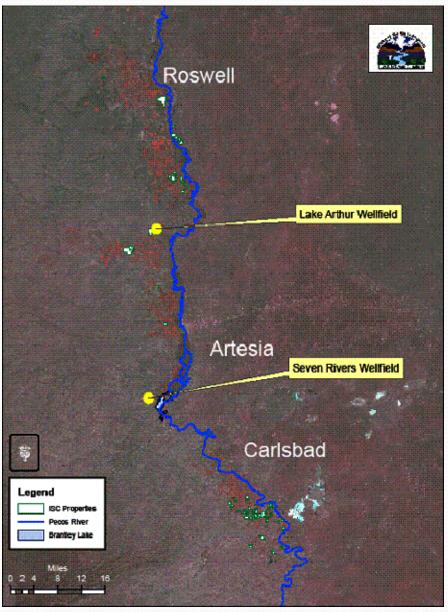
- Deliveries to Texas calculated on a calendar-year basis
- Use of the Supreme Court River Master's Manual & decisions
- Rapid "repayment" of any net shortfalls



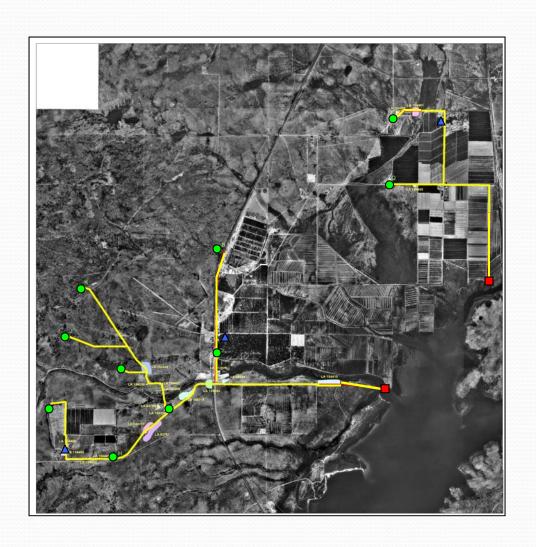
Settlement Objectives

- Permanent compliance with the Pecos River Compact and Decree
- Increased and stable water supply for Carlsbad Irrigation District
- Reduced likelihood of a priority call on the Pecos River
- Bring basin back into hydrologic balance

Augmentation Well Fields



Seven Rivers Well Field



- 11.5 miles of pipeline
 - 2 outfall structures
 - 10 ISC owned wells
 - 3 SRI owned wells

Triggers for Well Field Operation

(in terms of Project supply available to CID)

- March 1
- May 1
- June 1
- July 15
- September 1

- < 50,000 AF (Determined Nov 1)
- < 60,000 AF (Determined Mar 1)
- < 65,000 AF (Determined May 1)
- < 75,000 AF (Determined Jun 1)
- < 90,000 AF (Determined Jul 15)

You don't know what you don't know.

Projection Date	Target	2011 Pro. Need	2011 Act. Need	2011 Act. Pumped	2012 Pro. Need	2012 Act. Need	2012 Act. Pumped
March 1	50,000	0	0	0	8,245	24,464	8,646
May 1	60,000	1,190	7,525	1,148	22,990	31,034	3,888
June 1	65,000	9,204	13,820	922	26,784	34,444	1,970
July 15	75,000	17,740	21,023	2,445	38,252	46,551	1,264
Sept. 1	90,000	17,860	40,371	8,574	42,869	?	
Total		17,890	40,371	13,089	42,869		15, 768

All entries AF (Acre Feet) unless otherwise indicated

It is what it is.

2011 increased allotment by 100% (.7 vs. 1.4)

• 2012 increased allotment to date by 100% (.45 vs. .9)

If something sounds to good to be true, it probably is.

- Permanent compliance with the Pecos River Compact and Decree
- Increased and stable water supply for Carlsbad Irrigation District
- Reduced likelihood of a priority call on the Pecos River
- Bring basin back into hydrologic balance

Always have a back-up plan.

- Hope for the best, plan for the worst
- Good planning is not business as usual
- Survival depends on coping skills
- Focus on the best potential
- Consolidate area
- Maximize investment
- Don't be too optimistic
- Bad planning can put you out of business
- Get professional help